W5YI

Nation's Oldest Ham Radio Newsletter

REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

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NPRM Issued: Testing Foreign Hams Amateur License Recovation Begun More on the DXCC Backlog Status of Herb Schoenbohm, KV4FZ June VEC System Statistics Personal Computing News FCC Fines Broadcast Pirate \$17,500 New Communications Products Commission Rule Making Autoforwarding of HF Packet to End HF Packet Status Recapped FCC Grants Spread Spectrum STA ...and much, much more!

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August 15, 1992

FCC Proposes VE's Examine Foreign Visiting Hams

The Federal Communications Commission has suggested a novel licensing system whereby foreign amateur operators visiting the United States for a short time could operate their ham radios for up to 60 days.

Such persons would include vacationers, convention delegates, meeting attendees and tourists who wish to operate their amateur stations while in this country. The Commission believes this proposal would extend the amateur operator's ability to enhance international goodwill.

Currently, there are two ways a foreign amateur operator can be authorized to operate an amateur station in the United States. First, by passing the necessary examinations and receiving a 10-year term amateur service license. This method is generally used by non-citizens who reside premanently in the United States or who are here for a lengthy stay.

Second, citizens of the 76 countries whose governments have signed reciprocal operating agreements with the United States may, on the basis of the amateur service licenses issued by their own countries, be issued one-year permits to operate amateur stations while in this country.

Many visiting foreign amateur operators are ineligible for a reciprocal permit, however, because there is no reciprocal agreement between our government and theirs. Their only alternatives are to pass the examinations for a Commission-issued license before visiting the United Sates or during their stay here.

The objective of the FCC's proposal is to devise a convenient and efficient procedure that will make it possible for a foreign amateur operator on a brief visit to the United States to operate an amateur station. The FCC said "We believe that a single, consecutive 60-day period of authorization will meet the time requirements needed by most such visitors."

To accomplish this goal, the Commission would:

- Confirm that the person currently holds an amateur service license from the country of citizenship;
- (2.) Determine the extent of the operating privileges granted by the license;
- (3.) Make certain that the person is qualified to perform the duties of an amateur operator in the United States and that authorization is in the public interest;
- (4.) Provide the foreign amateur operator with a document attesting to his/her qualification; and
- (5.) Record pertinent data to contact the person if necessary.

The Commission said this process would be designated as the licensing of a temporary visiting amateur operator, be available throughout the country, and be completed quickly.

All amateur operator license examinations are currently administered in the private sector either

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in the volunteer-examiner coordinator (VEC) system or, for Novice Class operator examinations by two volunteer examiners (VE's). The Novice testing program is currently in the process of being folded into the VEC System.

The FCC said "Although there are no limitations on where the examinations can be administered. VE's many not be available in many foreign countries. The VEC's coordinate the efforts of the VE's in preparing, administering and grading examinations. We believe that the most efficient means of authorizing operation by foreign visitors is found in the VEC System.

"In that system, thousands of examinations are given annually by VE's under the guidance of the VEC's. Using the VEC System would make it possible to give foreign visitors examinations in a great many places without delay. There are 18 VEC's and some 20,000 to 30,000 accredited VE's in the United States and elsewhere. They prepare and administer well over 100,000 examinations annually to 65,000 to 75,000 persons. ...the highly effective procedures and methods of the VEC System can be used for licensing the temporary visiting foreign amateur operators."

The Commission said that "Under the proposed procedure, we would consider the possession of the foreign amateur service license as proof of qualification in eight of the nine operational and technical topics contained in every written examination. What is not covered by the foreign license are our rules for the amateur service. There is no basis for us to conclude that the holding of a foreign license is proof of knowledge of the rules for the amateur service in the United States."

VE's to approve foreign amateurs

Therefore, the FCC recommended in a Notice of Proposed Rulemaking that the VE's inspect the foreign operator's amateur service license, review identification credentials, and determine the extent of the operating privileges prior to administering a 20 question test; Element 5. The minimum passing score would be 18 questions answered correctly.

The examination would be on those aspects of our rules that are most applicable to the type of operation in which the visitor plans to engage while in the United States. Without compromising the examination, the VE's would be able to explain immediately any rule that the visiting foreign operator wants clarified. The VE's could administer the same questions on the amateur service rules that already appear on the question pools maintained by the VEC's. We suggest that the VEC's take appropriate questions from the existing question pools to create a separate question pool.

"If the foreign operator passes the examination, the

VE's would record the person's name, address while in the United States, the foreign amateur station call sign and the privileges authorized by the foreign license. They would also issue a Certificate of Successful Completion of Examination (CSCE) to the foreign operator which would serve as proof of the foreign operator's conditional license authorizing operation in the United States."

"Upon notification by the VE's of the completion of the transaction, the coordinating VEC would add the name and U.S. addresses of the temporary foreign visiting operator to a data base that is maintained and forwarded to the Commission on a regular basis."

[The FCC added a footnote: "The VEC's are experienced in maintaining data bases using modern data processing. They currently maintain a data base of Technician operator class licensees who have passed a telegraphy examination."]

"Upon receiving a CSCE from the VE's, the temporary visiting foreign operator would be authorized to begin a single consecutive operating period, not to exceed 60 days, at any time within 365 days of the issuance of the CSCE. For those persons who visit the United States several times a year, the process would have to be repeated for each visit.

"Because we are proposing to permit the stations of amateur operators from foreign countries that do not have a reciprocal agreement with the United States, we specifically invite comments from other government agencies as well as from the amateur community concerning any potential national security implications of this proposal."

Operating privileges

Finally, because of the diverse privileges afforded amateur operators by the various countries, it is not feasible to equate directly the classes of amateur operator licenses issued by those countries with an FCCissued amateur operator license.

For example, Commission rules authorize a Canadian licensee or a reciprocal permittee the same privileges in the United States as those authorized by his/her own government, but not to exceed those granted to the Commission's most privileged licensees.

Thus the Commission proposed that the temporary visiting foreign amateur operator also be so limited. The FCC said this approach leaves the issue of specific operator restrictions entirely to the country issuing the license. The Commission also proposed to include for temporary visiting foreign amateur operators, the present limitation that any person holding an FCC-issued operator/primary station license is authorized only the privileges of that license.

Station identification of a visiting foreign amateur

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operator would consist of the foreign amateur's call sign prefixed with the letter-numeral designating the station's U.S. location. (For example: W5/XE1HE)

The Commission further proposed to expand Section §97.527(a) which authorizes VE's and VEC's to be reimbursed for out-of-pocket expenses incurred in preparing, processing, administering or coordinating examinations for a Technician and higher class license to include examination for certification of a temporary visiting foreign amateur operator.

"We believe that it is in the public interest to provide a procedure that allows temporary visiting foreign amateur operators to operate their stations while in the United States. This will particularly benefit tourists who come to the United States on relatively short notice. Additionally we believe that the proposed procedure will enhance international good will.

"Further, the proposal, as outlined above would result in no cost to the Commission. The system would be administered and coordinated by the VE's and VEC's who can be reimbursed for their out-of-pocket expenses. We invite all interested parties to comment on the proposed rules. ...Interested parties may file comments on or before October 26, 1992 and reply comments on or before November 30, 1992."

FCC Commissioner James H. Quello issued a statement saying that he was "...concerned that the proposals contained in this Notice will disadvantage U.S. amateurs seeking to operate their amateur stations in countries that have not signed reciprocal operating agreements. What incentives will foreign governments have to enter reciprocal operating agreements with the U.S. when their citizens are allowed to operate in this country without such agreements?" (Action by NPRM, released Aug. 6, 1992, PR Docket 92-167)

HAM LICENSE REVOCATION PROCEEDING INITIATED

On September 24, 1990, *Thomas M. Haynie*, *WB4PVK* of Virginia Beach was convicted by a Federal District Court jury in Norfolk, Virginia of intentionally interfering with the operation of a communications satellite and unauthorized operation of a satellite uplink transmitter.

The incident took place right after the infamous April 1986 Captain Midnight satellite incident when John R. MacDougall, KA4WJA of Ocala, Florida overrode Home Box Office programming. MacDougall, an owner of a retail satellite dealership, was arrested, convicted and fined \$5,000 and sentenced to one year's probation. After the Captain Midnight incident, Congress enacted new legislation (Section 303) making intentional interference to a communications satellite a felony.

Three episodes of deliberate satellite interference again occurred on September 6, 1987 to the adult programming of the American Ecstacy and Playboy Channels. The Playboy Channel was airing an "R" rated movie with some nudity at the time. For about 30 seconds right in the middle of the movie another transmitter came on the air and replaced Playboy with a religious message in red urging repentance. It resulted in the most extensive investigation the FCC has ever had to find the jammer.

Armed with a recording of the message, the Commission was able to determine the type and maker of the character generator used. The manufacturer furnished the FCC with their customer list. Transmitter analysis of the interfering signal permitted the FCC to calculate the amount of power necessary to replace the Playboy Channel and to produce a unique spectrum "fingerprint." Through an elimination process, several satellite uplink facilities were eliminated. All other uplink licensees throughout the United States were inspected by the Commission.

The FCC was eventually able to pinpoint the interference as coming from a transmitter at the Christian Broadcasting Network at Virginia Beach. Videotaped samples of CBN's transmitter signal output matched the Playboy interference. The records indicated the operator on duty was Thomas M. Haynie.

On December 7, 1990, Haynie was sentenced to three years imprisonment, all of which was suspended, ordered to pay a \$3,000 fine (\$2,000 of which was suspended) and ordered to perform 50 hours of community service each year for the next three years. Haynie appealed but the conviction was upheld on August 14, 1991. The decision has now become final.

The FCC's Field Operations and Private Radio Bureaus are now moving to strip Haynie of his commercial Radiotelephone and Amateur Advanced Class radio operator licenses. In a July 31, 1992, Show Cause Order, the FCC said "...it appears that Haynie lacks the requisite qualifications to possess a radio station license or to be a Commission licensed radio operator." FCC said the illegal activities demonstrate his unwillingness to comply with government regulations.

"The Communications Act gives the FCC authority to suspend a radio operator's license for violating, causing, aiding or abetting the violation of any Act or treaty of the United States [and] ...for willfully or maliciously interfering with any other radio communications of signal." Haynie was given 30 days to request a hearing or to submit a written statement on why his General Radiotelephone and Amateur Advanced Class radio operator licenses should not be revoked. (Strangely, due to a plea bargain arrangement, MacDougall's ham license was never revoked by the FCC.)

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MORE ON THE DXCC BACKLOG

We have gotten quite a few letters on the DXCC backlog story that we printed in our last issue. Far more than we anticipated. And they are all over the lot! Each was very firm in their convictions.

As a general rule, DXers seem united in their effort to preserve all aspects of the League's DXCC program. One writer told us that DXers at the DXCC/ARRL forum in Visalia were in "essentially 100% disagreement" that the number of DXCC types and endorsements be returned to Mixed and Phone, ...or Mixed, Phone, CW and 5BDXCC. He also blamed poor computer software at the League as a contributor to the backlog.

Another reader was a little more hostile. He said the problem was "...incapable management at the senior level" and "...lack of business background [and] poor long range planning" on the part of the Board of Directors.

Another observation: "...as usual, your comments were fairly reported. ...Let us hope that ARRL management will, at long last, take the initiative to solve their troubles. As you have pointed out, it appears that the DXCC 'tail' is now wagging the ARRL 'dog.'"

Still another pointed out that since DXCC members are now required to make a cash payment for DXCC services they are "...customers of the ARRL. DXCC members are entitled to courteous, efficient and timely service from those in ARRL responsible for the DXCC program." He called previous DXCC handling "...rude and arrogant."

Many readers pointed out their frustrations in getting their DXCC records straightened out. One common denominator: DXers take DXCC VERY seriously.

Response by the League

Bob Winn, W5KNE, editor of the weekly news bulletin QRZ DX asked ARRL Executive Vice President Dave Sumner, K1ZZ to respond to the article. Here is Sumner's answer which Bob printed in his QRZ-DX August 10th issue.

"You ask 'is the DXCC program bankrupting the ARRL?' The answer is an unequivocal NO. The League's financial statements are a matter of public record; you can look in May QST and see that we're doing fine financially.

"Fred Maia is entitled to his opinion as to the relative importance of DXCC, and the proportion of the League's resources to which the program should have claim. And I think nearly any reasonable person would agree that in the short term, we're having to devote more resources to the program than we would be comfortable committing for the long haul. On the other hand, DXCC is by far the most significant awards program in all of Amateur Radio, and is increasing in popularity. In my opinion, there is no question but that it merits continued support.

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"I have to disagree with Fred's observation concerning the significance of single-band awards in contributing to the backlog. What the creation of the single-band awards for 80, 40 and 10 meters did accomplish was to force us, finally, to confront the issue of computerization of DXCC records. It made no sense at all for a participant to have to submit the same card multiple times for credit toward different kinds of DXCC, but that's exactly what the old, manual system required. This had to change.

"In the long run, creating a later start date for the singleband awards would not have avoided the problem. It would have provided another critical data element to be checked on each and every credit. On top of that, it would have burdened DX stations, QSL managers, and volunteer QSL bureau workers with having to deal with the requests for repeat QSOs and QSLs.

"We knew the conversion of the old records would be painful. We didn't know exactly how painful until we got well into the project, because we had thought, as Fred says, that the paper records were accurate. Most of them are. However, enough problems were hidden in the old filing cabinets to make resolving them a somewhat more formidable task than we'd expected. I don't offer that as an excuse, nor to shift blame to earlier generations; in retrospect, it's obvious we should have expected that such problems existed because they're inevitable in any manual system that lacks double-entry or other means of error trapping.

"Now that the DXCC Branch staff is well up the learning curve on the new system, the computer records being created are quite accurate -- at the very least, as accurate as the old manual records. If errors do creep in they can be caught by the DXCC member, who gets much better feedback now than before. While we're striving for 100% accuracy, we don't mind being told about an error by the participant because then it can be corrected, immediately and forever

"Right now we have two challenges to DXCC. One is to whittle down the backlog of pending applications. We'll deploy temporary resources to do that to the extent we're able to use them efficiently without disrupting other operations. The second, and in my opinion more important, challenge is to continue to move in the direction of field checking and computerization. A field-checked application provides better service to the member, and involves less work for staff (and consequently, less expense). I see no reason why, ultimately, members shouldn't be able to submit DXCC applications on disk or via other electronic media, reducing the amount of keyboarding that has to be done at Headquarters.

"Members have been extraordinarily patient with us, in part because they understand the ultimate benefits of the conversion and in part because they realize the rest of the League's mission can't be suspended while we work exclusively on DXCC. The Board also has been extremely supportive; I don't recall the Board ever denying a staff request for resources for DXCC.

"With continued support, and with the fine DXCC Branch staff working as they are, there's no reason we can't put the backlog behind us and provide an unprecedented level of service to DXCC members -- at a reasonable cost."

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STATUS OF HERB SCHOENBOHM, KV4FZ

Those of you that have been following the Herbert Schoenbohm case will remember that Herb/KV4FZ was convicted by a jury on April 24th of telephone toll fraud. Allegedly, Schoenbohm stole and used unauthorized telephone access codes in 1987 to defraud the Caribbean Automated Long Lines Service, Inc. (CALLS) out of thousands of dollars in telephone toll revenue. CALLS went belly up in 1986 and were under trusteeship at the time. The KV4FZ sentencing was scheduled for June 26th.

On May 27, Schoenbohm filed a motion for acquittal charging that the verdict was obtained wrongfully. New evidence obtained indicated that Schoenbohm never made the telephone calls that he was convicted of illegally making.

A shocking July 22nd article by an investigative reporter for the St. Croix Avis daily newspaper now questions "Did the U.S. Attorney's Office frame Schoenbohm in order to convict him on federal telephone fraud charges..." A smaller headline says "Startling evidence reveals that someone wanted him out of the way."

According to the report by journalist J. F. McCarthy, sworn affidavits show conclusively that the former police communications chief did not make 85% of the unauthorized calls the prosecution said he made. The other 15% of the calls include phone calls that Schoenbohm shouldn't have been billed for including local Virgin Islands and "800" toll free calls.

The government's star witness, a St. Thomas radio amateur, testified at KV4FZ's trial as to the accuracy of his determination that Schoenbohm allegedly made the illegal calls shown in Government Exhibit 5B. The amount of toll calls on that list amounted to \$29 over the \$1,000 threshold that the government needed to prosecute.

Reportedly, the phone number list used to convict Schoenbohm was submitted to the defense the day of the trial - not enough time for Schoenbohm to check the numbers. After a thorough check began on May 18th, it was found that the calls were not made by KV4FZ; instead they were made by personnel of WVGN-FM 105.1 radio in St. Thomas using access number 116026 and other individuals who have been identified as customers of CALLS.

Schoenbohm says his sentencing has now been postponed "indefinitely" due to the evidence mounting against the prosecution. He remains free on \$25,000 bond. KV4FZ insists on his innocence and is working diligently to clear his name.

A group of amateurs have written the FCC demanding that Schoenbohm be taken off the air

because of his status as a convicted felon.
[Editor's note: Felons can and do hold amateur radio licenses and this appears to be an accepted policy of the Commission. Prisons have been known to conduct amateur training classes with VE's examining prisoners for ham radio tickets as part of their rehabilitation program.]

JUNE VE PROGRAM STATISTICS

<u>June</u>		1990	1991	1992
No. VEC's		*18	*18	*18
Testing Sessions		485	572	880
VEC	1990	1991	1992	
ARRL	43.9%	50.9%	53.8%	
W5YI	36.3	30.9	31.4	
CAVEC	5.4	3.3	3.4	
DeVRY	3.5	4.4	2.3	
SunV	1.9	0.9	1.8	
Others (13)		9.6	7.3	
	e Sessions	3046	3716	5110
Elements Administ.		8435	12913	16811
VEC	1990	1991	1992	
ARRL	48.3%	56.1%	56.8%	
W5YI	30.7	22.8	25.1	
SunV	2.8	2.2	3.8	
CAVEC	6.6	4.7	3.3	
DeVRY	2.5	3.8	2.1	
Others (13)		10.4	8.9	
	e Elements	56281	83845	108510
Applicants	Tested	5306	7867	10180
VEC	1990	1991	1992	
ARRL	48.1%	56.5%	56.1%	
W5YI	30.7	22.7	25.3	
SunV	2.6	2.0	3.4	
CAVEC	5.6	4.0	3.3	
DeVRY	2.8	4.3	2.1	
Others (13		10.5	9.8	
Year-to-Dat		34234	50279	64683
	100000000000000000000000000000000000000			
June		1990	1991	1992
Pass Rate - All		62.4%	66.7%	64.9%
Applicants/Session		10.9	13.8	11.6
Elements/Applicant		1.6	1.6	1.7
Sessions Per VEC		26.9	31.8	48.9
Administrative Errors by VE's/VEC's				
<u>June</u>		1990	<u>1991</u>	<u>1992</u>
Defect. Applications		0.9%	0.5%	0.2%
Late Filed Sessions		4.3%	2.6%	1.3%
Defective Reports		0.6%	0.3%	0.1%
[Source: Personal Radio Branch/FCC; Washington, D.C.]				

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- According to a news release sent out by Jim Georgias, W9JUG, the *Great Lakes Amateur Radio Club VEC, Inc.*, [P.O. Box 273, Glenview, IL 60025] is the new name of the DeVry VEC. Georgias is no longer employed at DeVry, hence the need for a name change. "All current DeVry VE's are automatically accredited by the Great Lakes VEC."
- If you can't fight'em, join'em department! Big-name companies are going low-end! Look for IBM to take the same route as Compag computers, only more so. Financially troubled Compag had an image of top-quality ... and prices to match. Earlier this year they fired their CEO and introduced a promotional line (fittingly named "Pro-Linea") at sub-Compag prices. The line, which is designed and manufactured in-house, has been selling like crazy and has - almost immediately - returned the company to profitability. It hasn't gone unnoticed. Compaq says "ProLinea" quality (and parts) are the same as their higher end "Deskpro" line, but with less features.

IBM research has disclosed that most PC users (including large companies) are buying small computers as commodity items from low-price direct-response marketers. Now comes word that IBM Corp's Personal Systems Division is breaking away from IBM corporate. The new spun off subsidiary is totally autonomous and responsible for their own PC development, production, marketing and promotion.

IBM's primary distribution channel has been to "value added resellers" and corporate accounts. (VAR's bundle application specific software and/or hardware to the PC.) That will change. The objective of the new PS Division is twofold. First, to market through totally new channels (including mail

order, telemarketing and mass merchandisers) and, secondly: to develop and sell lower-cost products faster.

And no longer will they be assessed charges for the layers of IBM corporate bureaucracy. Our sources tell us a super secret new "IBM value brand" will be introduced in September. IBM isn't talking, but remember you read it here!

- Mail and telemarketers no longer need to collect sales taxes if they do not have an office in the purchaser's state. A U.S. Supreme Court decision (Quill vs. North Dakota) upheld that a state cannot force a mail order company with no physical presence in that state to collect sales or use taxes on purely interstate mailorder sales. This means you do not have to pay a sales tax on ham gear or computer equipment you purchase out of state over the phone or by mail.
- Tandy/Radio Shack marketing executive, Ed Juge, W5TOO, sent out a press release reminding the public that Radio Shack introduced their TRS-80 Model 1, Level 1 exactly fifteen years ago [on August 3, 1977.] "Industry watchers disagree on who was "first" -- Radio Shack, Apple or Commodore." It wasn't until 1981 that IBM discovered and entered the marketplace.
- Police and fire officials in Brookville, Ohio asked the Dayton Amateur Radio Association to set up a command post to coordinate coverage of the visit of President George Bush. DARA sent their van and operators. Ham spectrum was not used; the van had previously been authorized to have equipment capable of operating on the Dayton fire and police frequencies. U.S. secret service officials commented that they wished similar facilities were available at other stops on the cross country junket.

- Hands free dialing! AT&T has a new low-cost voice recognition device that allows cellular phone users to "dial" a number by speaking the name of the person you wish to call. A \$20 ROM chip can be "trained" to recognize up to 40 key words in its memory.
- The July 20th New York Times carried an article about how ham operators in Sarajevo, Bosnia and Herzegovinia are gathering and passing on to the outside world accounts of their misery while being surrounded by Serbian troops. When the war started, Serbian attackers severed all regular communication links.

Ramiz Bisic, YU4AAW, a member of the Sarajevo ham club recruited fellow club members to form a network to obtain messages from people in beseiged towns and villages and relayed them to radio operators elsewhere. Serbian military operators are now appearing on the ham bands to warn that they will be shelled if they continue the practice.

- Headline in Charlotte Observer: "...ham radio operator helped keep airwaves open when Soviet troops threatened Baltic state a year ago." An accompanying article tells about how Roger Burt, N4ZC, of Mount Holly, N.C. received a letter from the president of Lithuania thanking him for his emergency communications assistance when Soviet troops clamped down on Lithuanian communications.
- And the Assoc. Press recently ran a wire story on how STS-50 space shuttle astronaut Dick Richards, KB5SIW chatted with sailors aboard a Polynesian-style sailing canoe crossing the Pacific Ocean. The 62-ft. twin-hulled canoe is a replica of an ancient Polynesian vessel. An amateur radio operator at the Univ. of Hawaii linked them.

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- The FCC has proposed new rules which will allow the Fire Radio Service to use additional low-power frequencies in the 72-76 MHz band on a shared basis with the Forest Products, Special Industrial, Railroad and Manufacturers Radio Services to conduct fire call box operations. The current fire call box frequencies are subject to 300 watt fixed station interference. Call boxes provide a method for fire alarm notification and a means for monitoring vacant buildings and offices.
- In response to two petitions, the FCC has proposed to permit manufacturers of digital devices to demonstrate compliance with FCC or international RF emission standards. At present only FCC Part 15 standards apply. The Commission noted that many other countries (most notably the European Community countries) are in the process of requiring digital devices (such as computers) to comply with international radio interference standards. The objective is to ensure that U.S. manufacturers have reasonable opportunities to compete fairly and effectively in the international marketplace.
- The FCC has taken steps to cancel the amateur radio operator license of Tracey L. Gullotti, KC6PTQ of Tarzana, CA. It is alleged that her mother, Sandra Crane N6TFO conducted her amateur radio license examinations in violation of §97.515(d).
- Shrimp boats operating off the Texas gulf coast are illegally using two meter repeater input frequencies for their logistical communications. One South Center Texas repeater had to be shut down for a week to avoid constant interference. The chatter appears to be Vietnamese. Many other commercial and law enforcement VHF

repeater input frequencies are being blocked. The Kingsville, Texas, FCC monitoring station reports the interference is widespread, but the violators are very difficult to apprehend. Complaints and information should be directed to: Brad Gillen, FCC Monitoring Station at 512/592-2531 and Mr. Kelso at Texas Dept. of Wildlife: 512/289-5566. (Tnx: W5FAH, Bill Porter)

Link Plus Corp. of Columbia, MD, recently unveiled an amateur radio version of its powerful Link-Plus digital signal processing technology that eliminates most noise and interference from SSB voice communications, thereby producing a significant boost in effective signal strength. LPC calls its new amateur product the MULE (acronym for Multi-Use Link Enhancer.)

In 18 separate tests carried out on three days over an 1,800 mile path under a variety of transmission conditions, Link-Plus processing produced an average 22 dB improvement in HF-SSB signal-tonoise ratio! In laymen's terms, the unprocessed signal had, on average, 160 times more noise content than the Link-Plus signal.

It's \$2,995 price tag probably places the MULE beyond the immediate reach of most hams. It connects by external cables to any HF radio. (1-800-982-2920)

• Personal Radio Exchange, the newsletter of GMRS users says Tandy/Radio Shack plans to import and distribute one and two channel GMRS transceivers at year end. The radios will be "entry-level" units crystalled on 462.7125 MHz for low-power simplex use. (The two channel rigs will have one other channel.) The intended market is for persons desiring short range communications that are a step up from unlicensed 49 MHz and 27 MHz CB. Purchasers will have to acquire GMRS licenses.

• The FCC has issued a \$17,500 fine to Andrew R. Yoder, of Chambersburg, PA for operating a pirate broadcast station on 7415 and 7416 KHz and for failure to allow FCC inspection of the station. Yoder had operated as Mr. Blue Sky of "Radio USA" since the 1980's.

To avoid detection, he maintained no set schedule, operated sporadically, and moved his station to many different locations. The FCC found "Radio USA" originating at various times from within the states of Michigan, Ohio, New York, Pennsylvania, Tennessee, Virginia and West Virginia.

Yoder, who is in the process of writing a book on pirate radio, denies he was behind the entire operation, refuses to pay the fine, and plans to file an appeal on the charges levied against him.

• The FCC has issued a Notice of Proposed Rulemaking seeking to allocate the 1610-1626.5 and 2483.5-2500 MHz bands for Mobile-Satellite Service (MSS) including the use of Low-Earth Orbit (LEO) satellites. The latter band is just above the 1.2-cm ham band. These allocations implement the decisions made at WARC-92.

These systems are expected to offer a wide range of new, low-cost services - such as two-way voice communications, FAX and data messaging with a potentially worldwide scope of service.

• A study by Austin, TX based Technology Futures, Inc. says we have only scratched the surface of our telecommunications potential. They say 8 million PC FAX cards will be in use by 1995, beginning the integration of computers, FAX and electronic mail. By 1999, 50 million U.S. households will have FAX. High resolution color FAX machines will capture at least 20% of the FAX market by 2000.

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 Jay O'Brien, W6GO of Rio Linda, CA is one of the first to file comments on the FCC's proposal to Relax Restrictions on Permissible Communications in the Amateur Service, PR Docket 92-136.

O'Brien says he is engaged in a business which involves Amateur Radio. "I publish the W6GO/K6HHD QSL Manager List which is a cross-reference by call sign between amateur stations and other amateur stations who act as 'managers' for the former. By referring to my publication, you may determine the correct mail route to use to obtain a QSL card."

W6GO says much of his data is obtained via Amateur Radio packet communications, originated by operators who do not have a pecuniary interest in his business. He exchanges QSL routing data with other stations at no cost. Under the current rules, this is permitted. "Under the new rules as proposed, these communications may be prohibited because it can be said that I have a 'pecuniary interest' in the information received as I offer it elsewhere for sale in printed and computer formats."

O'Brien suggested new Section §97.113 wording which would prohibit communications which facilitate a pecuniary interest of the amateur station initiating the communication. The 90 days comment period closes on October 1, 1992.

• The August 1992 Lambda Amateur Radio Club newsletter's lead article objects to Wayne Green, W2NSD/1 canceling their classified ad in 73 Magazine. Lambda ARC's members consist of gays and lesbians. Green criticized Lambda for suing the ARRL over their advertising policies. "Suers belong in the sewer. ...The righteousness of your claims are irrelevant," W2NSD/1 said. "I've come to the conclusion that homosexuality is ungodly. In God's scheme, homosexuality seems on a par with any other birth defect..." He also labelled homosexuality as "...God's error."

In an editorial, Lambda's outraged president *Jim Kelly, KK3K* said "Green's bigoted comments have destroyed any credibility he had [and] ...given much new credibility to his many critics... Our days of doing as we're told by bigots are over!"

Lambda's ad is still running in CQ magazine. "We will have to depend on this ad to reach gay and lesbian hams, especially new and younger potential members, until such time as our discrimination claim against the ARRL is finally settled and we are (hopefully) permitted to run an ad in QST," Kelly said.

 Senator Barry M. Goldwater, K7UGA (Rep.-AZ, Retired) has shocked the Republican party by taking a stand against President Bush's anti-abortion plank in the party's re-election platform. According to the Associated Press and other news services, Goldwater says that his party's strict stand against the right of choice threatens to leave the G.O.P in "shambles." K7UGA stated that "...if they [the Republican party] do not remove that from the platform, he [Bush] will lose the election. The party is a sinking ship."

K7UGA made his views known in a letter made public in Washington on Thursday, August 6. In it, Amateur Radio's 'elder statesman' at age 83 warned that any attempt to include President Bush's position against abortion in the party platform would lead to a meaningless convention and a defeat at the polls in November.

AUTOFORWARDED HF PACKET TO END

The amateur HF packet community is up in arms over the ARRL's refusal to recommend continuation of the FCC special authorization for automatically controlled HF packet operation. Their action was based on the recommendations of the ARRL Digital Committee and membership input.

The STA which had been in effect some six years expires on January 8, 1993. The League's Board voted to petition the FCC for semi-automatic, unattended digital operation on the HF bands. Here are excerpts from comments we have seen from snooping on packet messages:

[NØBM:]

The prohibition of automatic HF forwarding will result in a drastic and damaging affect on the amateur radio networks that now exist. There is little doubt that the HF network as we now know it will collapse. Few, if any HF sysops now operating will participate after the banning of automatic forwarding. Hence, the same network that now relays the far majority of health and welfare, National Traffic System and personal mail will close.

[WØRLI:]

The ARRL proposal, if implemented, will shut down the HF packet networks.

[N4HY:]

This means the end of the HF packet network which is the clear agenda of the AMTOR crowd.

[WAØCQG]

The survey of ARRL membership is a terrific idea if you want to form government regulatory policies from public opinion. I always understood that the League's role was to further technical excellence. Sometimes that is contrary to public opinion. What the FCC is asking for is, based on our actual STA experience, can we operate the service without interfering with each other. They didn't ask for our opinion.

[WD6CMU]

Saying we should junk HF packet because satellites are better is like the airline industry telling us we should throw away our cars, busses and trains because airplanes are faster. Let's get some regulations that

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allow automatic HF digital modes the room they need to breathe and develop.

[WOØD]

It seems to me that the opinions of the few are, once again, poised to trim rights and privileges from the many. But, if all who appreciate the automatic, efficient handling of their personal messages to their friends throughout the world will make their voice heard, this will not be the case.

[W3IWI]

The W3IWI mail switch handles 8000-12000 messages per month. My two HF ports typically handle 25-100,000 bytes of user-generated packet mail each day. [If the STA is not continued], I will be forced to go QRT. I simply cannot operate in the ill-defined 'semi automatic' mode legally which I liken to being half-pregnant or having half a pair of pliers.

[KBØQJ]

I certainly do not like what I see and I am about ready to depart from ARRL as I did in the 60's after the Incentive Licensing fiasco.

The ARRL's Executive Vice President, *David Sumner, K1ZZ* responded to the controversy on August 5th. Here are his comments:

HF PACKET STATUS RECAPPED

Some of the reaction to the ARRL Board's decision to seek rulemaking to permit semi-automatic HF digital operation evidences a misunderstanding of the present regulatory status of HF autoforwarding.

Under the existing rules, unattended HF operation is not permitted. Below 30 MHz, the only way a transmitter can be operated without a control operator present is as a beacon station, between 28.2 and 28.3 MHz, under the special conditions of Section §97.203 of the FCC Rules. Any other unattended operation is illegal.

The only exception is if *Special Temporary Authority* has been granted by the FCC for the operation of specific stations under different conditions, after a determination that it is in the public interest to do so. Since July 1987, an STA issued to ARRL has permitted a list of stations (presently 134, not all of which are active) to operate unattended on HF under certain conditions, for the purpose of testing and demonstrating packet radio autoforwarding.

It was never contemplated that the STA should be a device for granting special privileges to certain amateur stations that are denied to all others, for that is not a part of our regulatory philosophy in this country. Rather, the FCC granted the STA in anticipation that the experience thus gained would be used to prepare a petition for rulemaking that would seek to regularize the practice on a basis that would be generally accept-

able to the amateur community.

Such a petition was prepared and submitted to FCC in December 1989, seeking rules to permit unattended digital operation in segments of each HF band. The petition, RM-7248, aroused considerable opposition and very little support, even from proponents of HF packet autoforwarding, and was withdrawn in April 1990.

The original STA had been granted for 180 days, and renewed for one-year periods thereafter. By the end of 1989 the justification for the STA was wearing thin, but the FCC was willing to grant a renewal for 1990 based on the fact that a petition for rulemaking had been submitted.

After the petition reached a dead end, another attempt had to be made to define rules for unattended HF digital operation that would be acceptable to the amateur community. To provide time for this to occur, FCC renewed the STA in January 1991 and for a final time in January 1992. With or without a rules proposal, the STA would expire on January 13, 1993 -- and with it, all HF autoforwarding.

At the request of the ARRL Committee on Amateur Radio Digital Communication (usually simply called the Digital Committee) -- a group that had nurtured packet radio from its infancy -- a two-page survey questionnaire prepared by the committee was printed in January 1992 QST seeking opinions and comments on the issue. The same questionnaire also appeared in RTTY Journal.

Of the 507 respondents, a clear majority opposed automatic control on the HF bands, except when contact with the unattended station is initiated by a station with a control operator present -- dubbed semi-automatic operation.

By an even wider margin, the respondents favored limiting this form of operation to specific subbands but opposed giving unattended stations protected or exclusive status in those subbands. Many survey respondents seemed to be concerned about disruptive interference from "robot" stations to ongoing communication between live operators, which, they apparently felt, should have priority in the crowded HF bands.

In the meantime, the original Digital Committee had been split into two groups: one concerned with future technology, called the Future Systems Committee, and the other more operationally oriented, retaining the original name.

In late May, the Digital Committee held a meeting at which the survey results were reviewed and recommendations adopted for forwarding to the Board. The committee called for rules changes to permit semi-automatic (but not fully automatic) control of HF digital

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operations, and greater emphasis by the League on operator training and technical standards to ensure efficient operation.

In June, an ARRL bulletin was transmitted summarizing the committee's recommendations so members and others would have an opportunity to react to them in advance of the Board Meeting. Weighing the recommendations and this response, a majority of the Board voted to authorize the drafting of a petition for semi-automatic control and to urge the Committee to develop further recommendations for increased flexibility for HF digital stations.

Predictably, not everyone is satisfied with the Board's decision. Packet enthusiasts who have forgotten the long history of ARRL support for packet radio, including RM-7248, accuse the Board of "trying to kill packet." In fact, just the opposite is true: semi-automatic control is more flexibility than is now permitted, except under the soon-to-expire STA, and the Board is firmly on record as supporting even greater flexibility in the future. In the meantime, doing nothing is not an option if HF autoforwarding is to continue in any form at all.

It should be emphasized that autoforwarding above 30 MHz is not at issue; this is permitted, and will continue to be permitted, thanks to rules adopted in 1986 in response to an ARRL petition.

In accordance with the ARRL Board's instructions, a petition is being drafted for review by the ARRL Executive Committee, with further disposition to be determined by the Executive Committee or the Board.

FCC GRANTS SPECIAL TEMPORARY AUTHORITY NEW SPREAD SPECTRUM CODE, TECHNIQUES

After almost a year of study, the FCC has licensed an innovative spread spectrum wide-area network (WAN) project called the Packet Radio Internet Extension (PRIE). Participating in the experiment are several engineers prominent in digital communications, including Dewayne Hendricks, WA8DZP, Robert Buaas, K6KGS, Gwyn Reedy, W1BEL of PacComm, congressional candidate Glenn Tenney AA6ER, and Mike Chepponis K3MC.

The licensees hope, through a later rulemaking petition, to persuade the FCC to expand the kinds of spread spectrum operations permitted in the Amateur Radio Service, and to develop hardware designs that could be licensed to manufacturers in the amateur market. They will also develop applications for commercial and institutional customers under FCC Rules Part 5 (Experimental Radio Service) and Rule 15.247, which authorizes low-power spread-spectrum operation on a nonlicensed basis.

The Special Temporary Authority granted by the FCC permits the licensees to use spread spectrum codes and techniques that are not currently allowed under Part 97, and on frequencies not normally available for spread-spectrum use. The STA allows operation on 50-54, 144-148, 222-225, 420-450, 902-928, 1240-1300 and 2390-2450 MHz.

"There are a number of problems with the way the FCC defines amateur spread spectrum," WA8DZP told us. "There is a restriction on the spreading codes. Hardware is available, such as surface acoustic-wave devices, that allow you to do a lot more especially if you want to get higher processing gains using direct-sequence spread spectrum. To do this you need to use longer codes and higher chip rates than are allowed in the current rules."

"If you're going to have commercial products, you want to use existing or future commercial parts," he said. "Since 1985 when the rules came into effect, much has changed. In 1985 you couldn't go out and get commercial parts to do spread spectrum. Now, that has changed completely. The FCC has given us a vehicle to construct equipment using parts currently available, which we couldn't do under the existing rules."

"We can further our commercial interest but we can also further the use of spread spectrum in the Amateur Service, and we delineate when we are doing one and when we are doing the other," Hendricks added.

He also noted that the station ID rules are onerous for spread-spectrum use, although the STA granted to the PRIE experimenters does not exempt them from the current ID requirements.

In San Diego, the PRIE installations connect to computers at San Diego State University. This arrangement provides wireless access to the state-operated online catalog for all libraries in the University of California system. The system is currently available in a limited configuration (using non-spread-spectrum, PSK hardware) to librarians and will eventually be expanded to allow library patron access.

Funding has been allocated in the Bay area to connect 100 libraries from San Jose to Roseville, San Francisco to Sacramento, all in one wide-area network. Amateur Service radios are to be used for long haul links, and Part 15 radios for intra-city links.

Financial support for the project came from Tetherless Access Ltd., Apple Computer, and the Washington-based Council for Library Resources, a foundation that promotes library research. Equipment capable of permanent operation under Part 15 will be donated to the City of San Diego.